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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,756	09/30/2004	Kazuyasu Fujiwara	042751	8145
38834 7590 05/16/2007 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			EXAMINER WILLS, MONIQUE M	
			ART UNIT 1745	PAPER NUMBER
			MAIL DATE 05/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,756

Applicant(s)

FUJIWARA ET AL.

Examiner

Monique M. Wills

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This Office Action is responsive to the Amendment filed December 29, 2006.

The following rejections are overcome:

- Claims 1-4 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.
- Claims 1-6 under 35 U.S.C. 112, first paragraph.
- Claims 1-4 are rejected 35 U.S.C. 112, second paragraph.
- Claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over JP 2002-298909 (JP '909) in view of JP 2002-050398 (JP '398).
- Claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over JP 2002-110229 (JP '229) in view of JP 2002-050398 (JP '398).

However, claims 1-4 are newly rejected as follows:

- Claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over Onuki et al. U.S. Pub. 2005/0118512.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious

Art Unit: 1745

at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onuki et al. U.S. Pub. 2005/0118512.

With respect to **claim 1**, Onuki et al teach a nonaqueous electrolyte secondary battery comprising: a positive electrode for reversibly intercalating-deintercalating lithium ions [¶ 180]; a negative electrode for reversibly intercalating-deintercalating lithium ions [¶ 173]; and a non-aqueous electrolyte having a non-aqueous solvent and an electrolyte salt [¶ 170]. The electrolyte includes an unsaturated cyclic carbonate derivative of vinylene carbonate [¶ 137], and an overcharge inhibitor such as cyclohexylbenzene or t-amylbenzene [¶ 167]. The incorporation of the overcharge inhibitor can inhibit the burst and firing of the battery at overcharge [¶ 167]. With respect to **claim 2**, vinylene carbonate is present in an amount of 0.01% by weight or more embracing a ratio of 0.5 to 10 parts by mass per 100 parts by mass of the non-aqueous solvent [¶ 142]. With respect to **claims 3 & 4**, the cycloalkylbenzene and t-amylbenzene are present in the amount of 0.1% by weight to 5% by weight, embracing the instant ratio of 0.5 to 5 parts by mass per 100 parts by mass of the non-aqueous solvent.

Although Onuki teaches the cycloalkylbenzene derivative and tert-amylbenzene as equivalent overcharge inhibitors, the reference does not expressly disclose the combination of said materials in the electrolyte.

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ a mixture of cycloalkylbenzene and tert-amylbenzene, since "[i]t is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven.

Response to Arguments

Applicant's arguments, see pages 5-8, filed December 29, 2006, with respect to the rejection(s) of claim(s) 1-4 under 35 U.S.C. 103(a) as being unpatentable over JP '909, JP '398 and JP '229 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Onuki et al. U.S. Pub. 2005/0118512.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1745

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.


If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Patrick Ryan, may be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

3/12/07


STEPHEN KALAFUT
PRIMARY EXAMINER
GROUP 1700

Application/Control Number: 10/509,756

Page 7

Art Unit: 1745